



**Washington State
Department of Transportation**

**Washington State Department of Transportation
Interim Sustainability Plan – Annual Progress Report
December 2005**

Table of Contents

SECTION I: AGENCY INFORMATION, POLICY AND GOALS	4
SECTION II: REPORTING ON OBJECTIVES	5
SECTION III: COMMUNICATION AND EDUCATION	6
SECTION IV: STATEWIDE PERFORMANCE MEASURES	7
SECTION V: UPDATED OR REVISED GOALS AND OBJECTIVES	9
SECTION VI: PROGRESS IN OTHER AREAS	10
SECTION VII: UPCOMING CHALLENGES, BARRIERS & NEEDS	13

not meet this original intent. As a result, the agency's updated Sustainability Plan will add measurable goals & objectives.

SECTION II: REPORTING ON OBJECTIVES

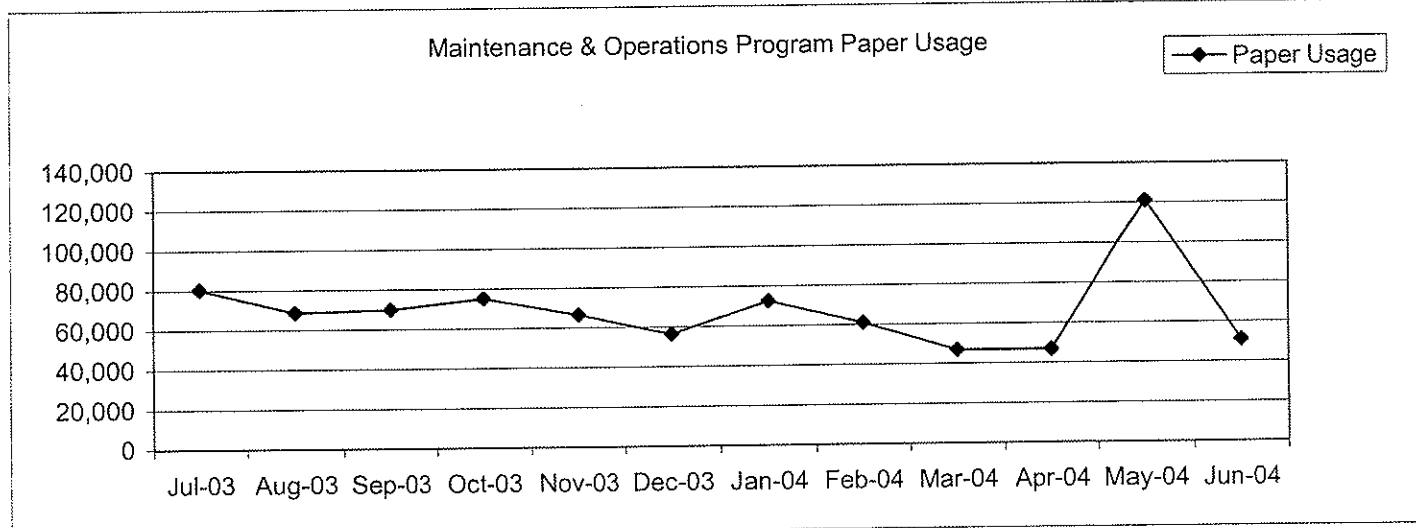
As noted previously, the 2003 Interim Sustainability Plan does not provide measurable objectives. In the absence of these, WSDOT's Maintenance and Operations Program established objectives to address the business functions of maintaining and operating state highways, planning and developing policy and oversight for capital facilities (buildings), and managing the WSDOT vehicle fleet (excluding the ferry system). This section reports on progress that Maintenance & Operations (M&O) is making in meeting these objectives. That is why objectives in this section are labeled "M&O Objective" rather than objectives established and tracked for the entire agency. Changes to 2003 Interim Sustainability Plan's baseline data are found in Section IV of this report.

- **M&O Objective: We will increase the amount of paper stock purchased that is at least 30% recycled content and chlorine free:**

Goal met – Maintenance & Operations purchased 100% recycled, chlorine-free paper.

- **M&O Objective: We will reduce the amount of paper used:**

From January 2004 to April 2004 paper usage started to decrease. The agency then started receiving a high volume of public records requests, and its usage increased slightly. The agency has implemented digital imaging for some enforcement, licensing and registration functions. WSDOT's 2005-2007 budget allows the agency to expand imaging to other areas as well. We anticipate that as our use of imaging expands, there will be less demand for paper copies and therefore less paper usage. The agency is in the process of implementing on-line licensing for several licenses and this too should reduce demand for paper.

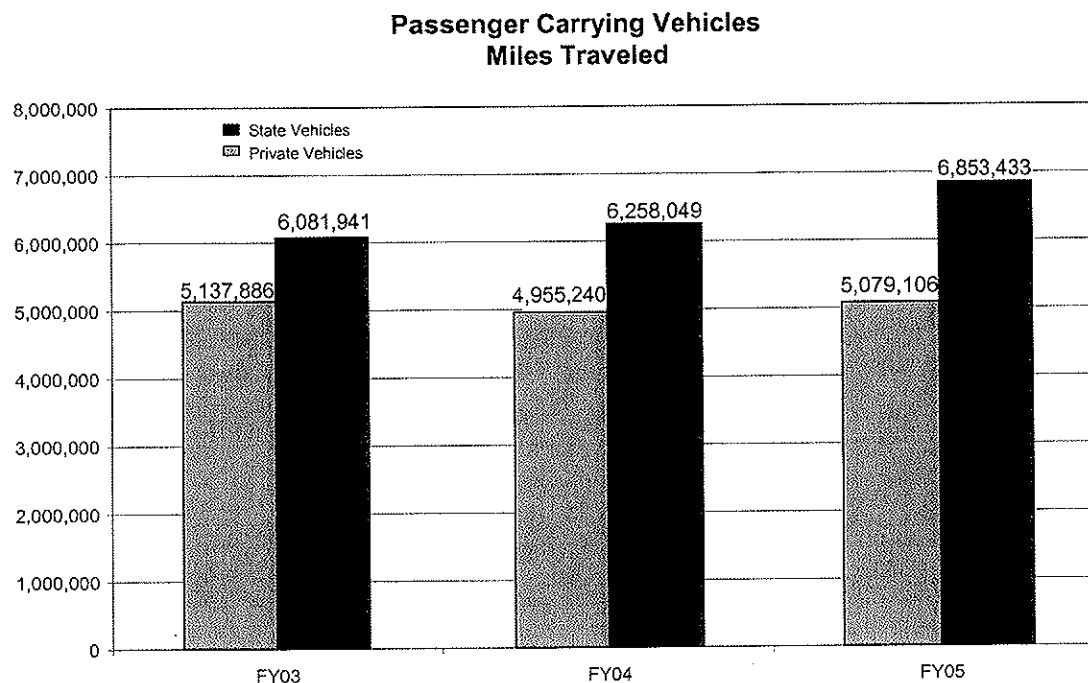


Source: WSDOT, Maintenance & Operations

SECTION IV: STATEWIDE PERFORMANCE MEASURES

A. Annual petroleum use, vehicle miles traveled on state business, and number and type of state vehicles owned (by model year).

The number of WSDOT passenger vehicles (Class I vehicles) and annual miles traveled have grown since FY 2003. This is consistent with increases in vehicular needs to manage the numerous construction projects underway. Privately owned vehicle (POV) use has pretty much held steady despite an increasing number of full time employees. A total of 4 hybrid vehicles were added to the agency fleet in 2003 & 2004. WSDOT currently has 135 pre-1996 vehicles in inventory, to be completely replaced by 2008.



Source (both): Office of the Transportation Equipment Fund

Pre-1996 Light Vehicle Replacement Schedule				
Fiscal Year	Qty In-Inventory At Beginning of FY	Qty Scheduled For Replacement	Replacement Percent	Qty Remaining
FY06	135	112	83%	23
FY07	23	14	61%	9
FY08	9	9	100%	0

WSDOT experience is that the second fiscal year of a biennium is busier for printing due to highway construction projects, which is why the total paper in FY05 is higher than FY04. Looking at the two ending fiscal years '03 & '05 provides a more realistic comparison of the amount of paper used—both recycled and virgin. .

	<u>FY 03</u>		<u>FY 04</u>		<u>FY 05</u>	
	Total Reams (8 1/2 x 11 equivalent)	Dollars	Total Reams (8 1/2 x 11 equivalent)	Dollars	Total Reams (8 1/2 x 11 equivalent)	Dollars
Recycled Paper (at least 30% Post Consumer)	61474	\$187,856.48	38036	\$131,652.39	54920	\$179,914.66
Virgin Paper **	2819	\$15,433.05	542	\$7,443.76	1282	\$ 11,178.69
Percentage of Virgin Paper	4.59%	8.22%	1.42%	5.65%	2.33%	6.21%

** Several paper types were not available in recycled stock. Recycled color copier paper is currently being tested with equipment for compatibility.

Source: WSDOT Printing Services

Janitorial paper products: General Administration purchases janitorial products for all buildings on the capital campus, including recycled content paper products. Information on janitorial products in leased and regional facilities is lacking. The Sustainability Plan update will explore using recycled paper product at WSDOT's Safety Rest Areas.

D. Quantity of office paper recycled.

General Administration does not track recycled paper by agency. Quantities for some WSDOT facilities might be determined based upon billing invoices but this information is not available uniformly.

E. Justification for any virgin office paper purchased.

Several types of paper that the department used were not available in recycled stock. In these limited instances, virgin paper was used.

SECTION V: UPDATED OR REVISED GOALS AND OBJECTIVES (WSDOT Interim Sustainability Plan is currently being updated.)

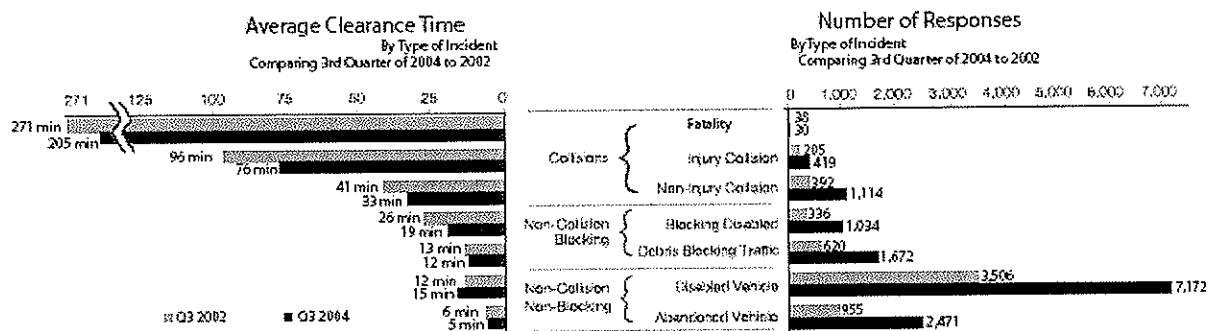
- New Statewide Objective: Reduce the use of equipment, supplies and other products containing persistent toxic chemicals (Executive Order 04-01).

Energy Use

- Nearly 4 years ago, the agency started purchasing Liquid Crystal Display (LCD) flat panel monitors to replace Cathode Ray Tube (CRT) monitors, with planned replacement of all monitors on a 4-year life cycle. These flat panel monitors use significantly less power than the old monitors. A 17-inch CRT monitor consumes 80-100 watts, while a LCD flat panel monitor with a similar display area consumes only 20-30 watts. Lower power consumption also means less heat output, reducing the load on the air-conditioning system.
- Over a 3-year period, beginning in 1999, WSDOT Northwest Region installed approximately \$1M worth of Light Emitting Diodes (LEDs) for red and green signals. These operate on 13 to 19 watts of power, replacing incandescent lamps that formerly used 135 watts of power each (a 80-90% power reduction). All new construction includes LED signalization as part of the specifications.

Incident Response & Ambient Air Quality

- WSDOT's Incident Response Program has primary goals of improving traveler safety and travel times by clearing accidents, abandoned vehicles and debris more quickly. These incidents are responsible for 25% of congestion on our urban commute routes. However, a secondary benefit of clearing these accidents is improved ambient air quality through reduced idling. In this situation, WSDOT can bring about larger societal sustainability gains at the same time that we may be lowering internal agency gains, due to the addition of somewhat inefficient Incident Response vehicles (trucks) and their increased patrolling mileage. Despite significant growth in the number of incidents requiring response, the incident clearing times have been reduced for the most part.



Source: Gray Notebook Lite, Vol. 19, p.3

Reuse, Reduce & Recycle

WSDOT reuses, reduces, and recycles a variety of resources, including hazardous substances such as cleaning solvents, motor oil, anti freeze, and mercury in fluorescent tubing. In 2003, WSDOT recycled 39,596 linear feet of fluorescent tubing at a cost of \$2,686 with an additional 33,677 linear feet recycled at a cost of \$2,451 in 2004.

Road system components such as luminaries, signage, landscaping and pavement are also included. Through pavement management and design improvements, WSDOT

WSDOT Roadside Herbicide Use (*approximate pound of active ingredients*)

2002 statewide use - 121, 105 lbs. - baseline

2003 statewide use - 124,426 lbs. - 2.7 percent increase

2004 statewide use - 87,111 lbs. – 30 percent decrease

2005 statewide use through Sept. 30 – 72,000 lbs.

SECTION VII: UPCOMING CHALLENGES, BARRIERS & NEEDS

WSDOT has identified a number of areas needing improvement in the Sustainability Plan update. These include more measurable goals and objectives, a better-defined communication plan, expanding baseline data to include the entire agency statewide, and increasing regional involvement and coordination with sustainability efforts.

Some of the upcoming challenges include increasing hybrid purchases and meeting LEED construction standards without additional funding. Although these actions should save funds in the long run, their higher initial costs generally mean a reduction in funding that can be used for other aspects of the vehicle fleet or building.

The department will be looking at water reduction measures implemented in response to the drought declaration that may be suitable on a permanent basis, as well as methods to reduce past practices of over-purchasing hazardous substances.

Between construction, incident response demands, and the fact that varying weather conditions (*something over which WSDOT has no control*) determine vehicle miles traveled for certain maintenance activities, it will be a challenge to meet the Executive Order goal of 20% reduction in petroleum use by 2009. Gearing up to deliver Transportation Partnership Act and Nickel projects may cause fuel use to actually increase but WSDOT will work towards improving per unit fuel efficiency and emission standards.

Finally, sometimes technology and markets need to advance in order to make sustainable actions more feasible. For example, printer problems with recycled cartridges have caused many to abandon their use until these products are more reliable. Likewise, the WSF pilot project with biodiesel did not support system-wide conversion at this time. Nevertheless, WSDOT will continue to focus agency sustainability efforts in areas with the greatest potential for positive impact and success.